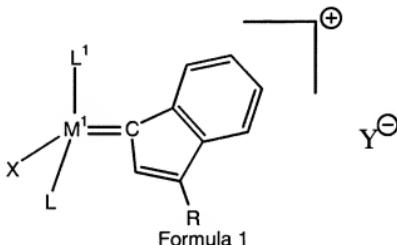


Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

- 5 1. (Currently amended) A process for the preparation of an, optionally hydrogenated, nitrile rubber comprising the steps of
a) reacting a nitrile rubber in the presence at least one compound selected
from the group consisting of compounds of the general formula I,



10

wherein:

M¹ is Os or Ru;

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R is hydrogen or a hydrocarbon selected from the group consisting of C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl, C₁-C₂₀ alkyl, aryl, C₁-C₂₀ carboxylate, C₁-C₂₀ alkoxy, C₂-C₂₀ alkenyloxy, C₂-C₂₀ alkynyoxy, aryloxy, C₂-C₂₀ alkoxy carbonyl, C₁-C₂₀ alkylthio, C₁-C₂₀ alkylsulfonyl and C₁-C₂₀ alkylsulfinyl;

20

X is selected from any anionic ligand; and

L¹ is a neutral π-bonded ligand, preferably but not limited to arene, substituted arene, heteroarene, independent of whether they are mono- or polycyclic;

L is a ligand selected from the group consisting of

25

phosphines, sulfonated phosphines, fluorinated phosphines, functionalized phosphines bearing up to three aminoalkyl-, ammoniumalkyl-, alkoxyalkyl-,

- alkoxylcarbonylalkyl-, hydrocycarbonylalkyl-, hydroxyalkyl- or ketoalkyl- groups, phosphites, phosphinites, phosphonites, phosphinamines, arsines, stibenes, ethers, amines, amides, imines, sulfoxides, thioethers and pyridines;
- Y⁻ is a non-coordinating anion; and optionally further in the presence of at least one co-olefin and
- and for the hydrogenated nitrile polymer
- b) hydrogenating the product of step a).
2. (Original) A process according to claim 1 wherein the nitrile rubber is hydrogenated and the hydrogenation is performed under homogeneous catalytic conditions.
3. (Original) A process according to claim 2 wherein the hydrogenation is carried out *in situ*; that is, without first isolating the product of step a).
4. (Original) A process according to any of claims 1-3 wherein L is a trialkylphosphine, L¹ is 1-methyl-4-iso-propylphenyl, X is a chloride ion, R is phenyl and M is ruthenium.
5. (Currently Amended) A process according to ~~any of claims 1-4~~ claim 1 wherein the ratio of compound to nitrile rubber is in the range of from 0.005 to 5.
6. (Currently Amended) A process according to ~~any of claims 1-5~~ claim 1 when conducted in the presence of at least one co-olefin.
7. (Currently Amended) A process according to ~~any of claims 1-6~~ claim 1 wherein the process is carried out in an inert solvent selected from the group consisting of monochlorobenzene, dichloromethane, benzene, toluene, tetrahydrofuran and cyclohexane.

8. (Currently Amended) A process according to any of claims 1-7 claim 1 wherein the nitrile rubber is hydrogenated and the hydrogenation is carried out using a catalyst of formula :

$$(R^8mB)_lRhX^3n$$

wherein each R⁸ is independently selected from the group consisting of a C₁-C₈-alkyl group, a C₄-C₈-cycloalkyl group, a C₆-C₁₅-aryl group and a C₇-C₁₅-aralkyl group;

B is selected from the group consisting of phosphorus, arsenic, sulfur, and a sulphoxide group ($S=O$) ;

X^3 is selected from the group consisting of hydrogen and an anion; and

$|$ is 2, 3 or 4, m is 2 or 3 and n is 1, 2 or 3.

15 9. (Original) A process according to claim 8 wherein the hydrogenation catalyst is $(\text{PPh}_3)_3\text{RhCl}$.